

THE 2002 NETL SENSORS AND CONTROL PROGRAM PORTFOLIO REVIEW AND ROADMAPPING WORKSHOP: *GAS, EMISSIONS, AND PROCESS MONITORING*



OCTOBER 15-16, 2002
AT THE PITTSBURGH MARRIOTT CITY CENTER
PITTSBURGH, PA



Agenda

Day 1 - October 15, 2002

- 7:00 - 8:00 am **Registration and Continental Breakfast** - 2nd Floor Foyer
General Session - Salon 2
- 8:00 - 8:05 am **Welcome**
Susan Maley
U.S. Department of Energy, National Energy Technology Laboratory
- 8:05 - 8:30 am **Overview of ISCS Program**
Robert Romanosky
U.S. Department of Energy, National Energy Technology Laboratory
- 8:30 - 8:55 am **DOE - Best Perspective: The Expanding Boundaries of a Shrinking World**
John C. Miller, U.S. Department of Energy
- 8:55 - 9:20 am **Advanced Sensor Technology** - Application Nanotechnology
John Cumings
University of California at Berkeley and Nanomix
- 9:45 - 10:00 am **Break** - Foyer
- 10:00 -12:00 pm **Review of Current Work (Parallel Sessions)**
- Development of Gas Sensors - Salon 4**
- ▶ Development of Silicon Carbide Devices for Harsh Environment Sensing
Center for Sensor Materials, Michigan State University
Ruby N. Ghosh
 - ▶ Metal-Oxide Sensors for Measuring Various Gases
Sensor Research and Development Corporation
Brent Marquis
 - ▶ Advanced Solid State Sensor Technology Base for Vision 21 Systems
West Virginia University, Department of Chemical Engineering
Charter D. Stinespring
 - ▶ Fiber Optical Micro-Detectors for Oxygen Sensing
Center for Sensor Materials, Michigan State University
Gregory L. Baker
- Emissions Measurement - Salon 5**
- ▶ Cavity Ring-Down Spectrometer Systems for Detecting Trace Mercury Emissions
Sensor Research and Development Corporation
Christopher Carter
 - ▶ Development and Applications of Gas Sensing Technologies to Enable Boiler
Balancing
The Ohio State University
Prabir K. Dutta
 - ▶ Development of On-Line Instrumentation and Techniques to Detect and Measure
Particulates
California Institute of Technology
Yongchun Tang
 - ▶ Multifunctional Solid State Sensor ($\text{NO}_x/\text{O}_2/\text{CO}$) for Coal Power Applications
University of Florida
Eric D. Wachsman

Agenda, (continued)

- 10:00 - 12:00 pm Review of Current Work (*Continued*)
- Combustion Measurement and Control - Salon 6**
- ▶ High Temperature Solids Velocity Probe
REM Engineering Services, PLLC
Esmail R. Monazam
 - ▶ Carbon Monitor for Coal and Fly Ash
Iowa State University
Robert Weber and Andy Suby
 - ▶ Sensor Development for Next Generation Turbines
U.S. Department of Energy, National Energy Technology Laboratory
Jimmy Thornton
 - ▶ CFD Investigation of Furnace Operational Conditions to Burner Flow Controls -
Project Plans
Reaction Engineering International
Marc Cremer
- 12:00 - 1:30 pm **Lunch** (*On Your Own*)
- 1:30 - 5:30 pm **Facilitated Breakout Sessions:** Barriers and Opportunities (*Parallel Sessions*)
- Gas Sensors - Salon 4
Emissions Measurement - Salon 5
Condition Monitoring - Salon 6
- 2:30 pm **Break** - Foyer
- 5:30 pm **Adjourn**

Day 2 - October 16, 2002

- 7:00 - 8:30 am **Registration and Continental Breakfast**
- 8:30 - 9:00 am Day 1 Insights and Comments
- 9:00 - 11:00 am **Breakout Sessions:** Collaboration and the Path Forward (*Parallel Sessions*)
- Gas Sensors - Salon 5
Emissions Measurement - Salon 5
Condition Monitoring - Salon 6
- 10:00 am **Break** - Foyer
- 11:15 - 12:00 pm **Session Report-Out and Wrap-Up** - Salon 2
- 12:00 pm **Adjourn**

